

## **Proposed Covered Species Selection Process and Potential Species for Coverage under the BDCP**

Habitat Conservation Plans, Natural Community Conservation Plans, and applications for California Endangered Species Act compliance must identify species that are proposed for regulatory authorizations. These species are typically referred to as “covered species.” A complete list of proposed covered species is necessary to inform the development of the BDCP’s conservation measures, including avoidance and minimization measures, and to ensure that the measures specifically address all species for which coverage under the BDCP in accordance with relevant legal standards may be sought.

The Endangered Species Act (ESA), the California Endangered Species Act (CESA), the Natural Community Conservation Planning Act (NCCPA) and other state and federal laws each set forth specific criteria that must be met for a species to be covered. The terms “coverage” and “covered” species as used are intended to refer broadly to regulatory coverage under the ESA, CESA, or the NCCPA. The species identified in this handout are being considered for coverage because of the potential that some form of incidental take authorization or other authorization for these species may be necessary or desirable to facilitate the implementation of activities and/or conservation measures covered by the BDCP. The list of potential covered species is by no means intended to capture all species that occur in the natural communities under consideration in the BDCP or the species and habitats that will directly or indirectly benefit from implementation of the BDCP. Many conservation measures developed to benefit a covered species, such as habitat restoration actions will likely benefit numerous species. The Steering Committee may also elect to include in the BDCP additional measures that benefit non-covered species and natural communities.

This list of potential covered species focuses only on species for which regulatory coverage through the BDCP may be necessary or desirable. It is limited to certain species currently protected under state or federal wildlife laws, for which the PREs may seek take authorizations or other authorizations, and to certain additional species that the PREs may want covered in the BDCP because of the likelihood that these species will be protected under state or federal law in the future. It does not attempt to specify the type of take authorizations that may be used for each species. The specific permits and permitting standards that may apply to each species can be determined once the impacts of proposed covered activities and conservation measures are more fully analyzed. Take authorizations under State law will be provided either through the NCCPA or through CESA. It is expected that for those species that are dependent on aquatic natural communities that are addressed pursuant to the standards of the NCCPA, incidental take of those species will provided under section 2835 of the Act. Species that are not associated with those natural communities, and are likely to be affected by certain covered activities, such as habitat restoration, will covered under section 2081 or 2080.1 of CESA.

The list of proposed covered species that will be used to inform the development of conservation measures (whether or not it is the list recommended here) is a “work in progress”. Species may be added or removed as more is learned about the impacts of

covered activities, the benefits of conservation measures, the status of affected species, or other new information. Likewise, throughout the BDCP planning process reference will be made to “proposed covered species” in recognition of the fact that the Fishery Agencies will ultimately determine which species are adequately covered by the BDCP at the conclusion of the BDCP permitting processes.

### **Species Evaluated for Coverage**

Species considered for BDCP coverage were limited to special-status species that are known to occur or are likely to occur in the BDCP Planning Area. Special-status species were defined as species that are:

- listed as threatened or endangered under the ESA;
- proposed or candidates for listing under ESA;
- listed as threatened or endangered under the California Endangered Species Act (CESA);
- candidates for listing under CESA;
- California species of special concern;
- California fully protected species;
- U.S. Fish and Wildlife Service (USFWS) birds of conservation concern;
- National Marine Fisheries Service (NMFS) species of concern;
- plants listed as rare under the California Native Plant Protection Act (NPPA); or
- plants included in the California Native Plant Society (CNPS) List 1A, 1B, or 2.

Four criteria were used by to evaluate the special-status species for coverage in the BDCP. The evaluation criteria, which are discussed in detail in Attachment 1, include:

1. Listing status of considered species
2. Occurrence of species in the Planning Area
3. Potential to be adversely affected by BDCP actions (covered activities and conservation measures)
4. Sufficient information to determine species impacts and develop conservation measures

The evaluation results for each of the species considered using the four selection criteria are presented in Exhibits 1 through 4, attached. Exhibit 1 provides an evaluation of potential covered listed fish and wildlife species while Exhibit 2 evaluates potential coverage of non-listed fish and wildlife species. Similarly, Exhibit 3 focuses on listed plants and Exhibit 4 provides the evaluation of non-listed plants.

## Summary of Evaluation of Potential Covered Species

Based on the evaluations for potential coverage presented in Exhibits 1-4 the species determined to have met all four of the selection criteria and may warrant coverage under the BDCP are listed below. These species are separated into two categories: 1) listed species and 2) non-listed species. California Fully Protected species are identified separately as a category of species that require special consideration. A fourth category of species—evaluation species—is also included. These are species for which one or more criteria are uncertain and for which additional information is required.

### *Listed Endangered, Threatened, and Rare Fish, Wildlife, and Plant Species*

The following species are proposed for consideration as covered species under the BDCP. These species all have special protection status under ESA and/or CESA and have met all of the species evaluation criteria for covered species. As noted above, the list of covered species and the exact nature of coverage required under the BDCP will be defined based on information developed throughout the BDCP planning process.

- Riparian brush rabbit (*Sylvilagus bachmani riparius*)
- Swainson's hawk (*Buteo swainsoni*)
- Giant garter snake (*Thamnophis gigas*)
- Delta smelt (*Hypomesus transpacificus*) and critical habitat
- Steelhead, Central Valley DPS (*Oncorhynchus mykiss*) and critical habitat
- Chinook salmon, Sacramento River winter-run (*Oncorhynchus tshawytscha*) and critical habitat
- Chinook salmon, Central Valley spring-run (*Oncorhynchus tshawytscha*) and critical habitat
- Green sturgeon (*Acipenser medirostris*)
- Conservancy fairy shrimp (*Branchinecta conservation*)
- Longhorn fairy shrimp (*Branchinecta longiantenna*)
- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Vernal pool tadpole shrimp (*Lepidurus packardii*)
- Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)
- Soft bird's-beak (*Cordylanthus mollis ssp. mollis*)
- Delta button celery (*Eryngium racemosum*)
- Mason's lilaeopsis (*Lilaeopsis masonii*)

Note that the ESA generally does not prohibit the take of plants by non-federal entities, and CESA does not prohibit the take of plants resulting from certain exempt activities, which may include certain proposed BDCP covered activities. However, take of listed plants is generally prohibited by the CESA, and impacts on listed plants must be addressed in ESA Section 7 consultations, including consultations regarding federal permitting actions such as the issuance of an incidental take permit under Section 10 of the ESA. Plant species were therefore evaluated for coverage in this evaluation, even

though it is not yet clear to what extent take authorizations for plant species will be required for BDCP covered activities and conservation measures.

### ***Non-listed Fish, Wildlife, and Plant Species***

Consideration for coverage of non-listed species was limited to special-status species because these species are recognized by federal and state wildlife agencies as declining and, therefore, are more likely than other non-listed species to become listed over the term of the BDCP permits. These species should be carefully considered for coverage based on the likelihood for listing under ESA or CESA within BDCP permit duration and as more information becomes known on BDCP activities and related affects.

- Suisun shrew (*Sorex ornatus sinuosus*)
- Tricolored blackbird (*Agelaius tricolor*)
- Yellow breasted chat (*Icteria viriens*)
- Western burrowing owl (*Athene cunicularia*)
- Western spadefoot toad (*Spea hammondi*)
- Longfin smelt (*Spirinchus thaleichthys*)
- Chinook salmon, Central Valley fall-/late fall-run (*Oncorhynchus tshawytscha*)
- Sacramento splittail (*Pogonichthys macrolepidotus*)
- White sturgeon (*Acipenser transmontanus*)
- River lamprey (*Lampetra ayresii*)
- Suisun Marsh aster (*Aster lentus*)
- Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*)
- Delta mudwort (*Limosella subulata*)
- Alkali milk-vetch (*Astragalus tener* var. *tener*)
- San Joaquin spearscale (*Atriplex joaquiniana*)
- Legenere (*Legenere limosa*)
- Heckard's peppergrass (*Lepidium latipes* var. *heckardii*)

### ***Fully Protected Species***

The California Department of Fish and Game cannot authorize incidental take of species that are “fully protected” under the California Fish and Game Code. Fully protected species are identified separately to make it clear that while they would not be proposed for take authorization, to the extent that BDCP actions may affect these species, avoidance measures will be incorporated to ensure that no take would result.

- Salt marsh harvest mouse (*Reithrodontomys ravivenstris*)
- Greater sandhill crane (*Grus canadensis tabida*)
- California black rail (*Laterallus jamaicensis coturniculus*)
- California clapper rail (*Rallus longirostris obsoletus*)

### ***Species Needing Additional Evaluation***

A number of special-status species need further evaluation to assess the potential need for regulatory coverage under the BDCP. These are species for which one or more criteria are uncertain and for which additional information is needed to determine if those criteria are met. These species should be reevaluated during the planning process and considered for addition to the covered species list should it be determined that they meet the selection criteria and take authorization would be needed under the BDCP.

**Listed Endangered, Threatened, and Rare Species Needing Additional Evaluation:**

- Riparian woodrat (*Neotoma fuscipes riparia*)
- Snowy plover (coastal population) (*Charadrius alexandrinus*)
- California tiger salamander (Central Valley DPS) (*Ambystoma californiense*)
- Succulent owl's clover (*Castilleja campestris* ssp. *succulent*)
- Boggs Lake hedge-hyssop (*Gratiola heterosepala*)
- San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)
- Hairy Orcutt grass (*Orcuttia pilosa*)
- Slender Orcutt grass (*Orcuttia tenuis*)
- Sacramento Orcutt grass (*Orcuttia viscida*)
- Greene's tuctoria (*Tuctoria greenei*)

**Non-Listed Species Needing Additional Evaluation:**

- Snowy plover (interior population) (*Charadrius alexandrinus*)
- Suisun song sparrow (*Melospiza melodia maxillaries*)
- Tule white-fronted goose (*Anser albifrons elgasi*)
- Coast horned lizard (*Phrynosoma coronatum frontale*)
- Pacific smelt (*Thaleichthys pacificus*)
- Slough thistle (*Cirsium crassicaule*)
- Heartscale (*Atriplex cordulata*)
- Brittlescale (*Atriplex depressa*)
- Vernal pool smallscale (*Atriplex persistens*)
- Big tarplant (*Blepharizonia plumose*)
- Lesser saltscale (*Atriplex minuscula*)
- Bristly sedge (*Carex comosa*)
- Round-leafed filaree (*Erodium macrophyllum*)
- Fragrant fritillary (*Fritillaria liliacea*)
- Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*)
- Caper-fruited tropidocarpum (*Tropidocarpum capparideum*)

### **Information Sources**

Sources of information used to identify the special-status species that could be present in the BDCP Planning Area include:

- Department of Fish and Game's (DFG's) California Natural Diversity Database (CNDDB);
- DFG's Wildlife Habitat Relationships species lists;
- species lists in the CALFED Multi-Species Conservation Strategy;
- species occurrence and habitat information provided in documents prepared for other HCPs and NCCPs with planning areas adjacent to the BDCP Planning Area; and
- species-specific occurrence information provided in documents available on DFG's, USFWS's, and NMFS's websites and other websites.

Special-status species of fish, wildlife, and plants known or likely to occur in the BDCP Planning Area are based on the sources of information described above.

## Attachment 1

### Criteria for Selection of Covered Species

Four criteria were used by SAIC to evaluate the species identified in Exhibits 1-4 for possible coverage under the BDCP. These criteria have been used in other HCPs and NCCPs to identify covered species and represent an accepted approach. All four of the criteria must be met for a species to be recommended for coverage.

1. **Listing Status:** The species is listed under ESA, CESA, or the California Native Plant Protection Act (NPPA) or could become listed during the term of BDCP permits. Species listed as threatened or endangered under ESA or CESA, as rare under NPPA, or state fully protected meet this criteria as already listed.

Non-listed species were considered likely to become listed in the future if:

- they are currently proposed for listing under ESA or are candidates for listing under ESA or CESA;
- they are a special-status species whose populations or habitats are greatly limited and are continuing to decline;
- they are covered under permits by other HCPs in northern California;
- FWS, NMFS, or DFG have indicated that a listing petition or listing package is likely to come forward; and
- a substantial proportion of their population is located in the Planning Area and could be substantially adversely affected by covered activities and conservation measures.

The potential for listing criterion will be updated if new information becomes available that could change the listing potential indicated in Exhibits 1-4. In many instances it is uncertain whether a species is likely to become listed and that uncertainty is noted on the table.

2. **Occurrence in the Planning Area:** The species is known to occur in the planning area or is likely to occur based on presence of habitat in the Planning Area and known occupied habitat near the Planning Area.

While all species listed in Exhibits 1-4 should meet this criterion, there are a number of species included on the table for which presence in the Planning Area is uncertain. The table column codes for this criterion identify species that are known to occur in the Planning Area with a “+” and those species for which the evidence indicates a probability that they could present but presence is uncertain with a “U”.

3. **Potential to Adversely Affect:** The species or its habitat could be affected by the types of activities and conservation measures anticipated to be covered under the BDCP. The type of action that could affect the species is identified by a code in the table column:

- “H” = could be affected by habitat restoration activities;

- “ID” = could be affected by in-Delta conveyance improvement facilities;
- “AD” = could be affected by an around-the-Delta conveyance along the eastern edge of the Planning Area; and
- “O” = could be affected by water operations.

Key assumptions regarding covered activities and conservation measures used to determine the potential to adversely affect species include the following.

- An around-Delta aqueduct would be siphoned under all tidal channels/sloughs such that impacts on tidal waters and riparian habitat within the floodplain would be avoided.
- Conservation measures could be implemented anywhere in lowland portions of the Planning Area that would likely be suitable for restoration of shallow subtidal aquatic, pelagic, intertidal marsh, floodplain riparian, and floodplain habitats.
- No facilities or habitat restoration would be constructed in uplands on the western edge of the Planning Area

Because covered activities and conservation measures will become more precisely defined over the course of BDCP planning, the likelihood for each species to be adversely affected by BDCP implementation will periodically be reassessed.

4. **Sufficient Information:** Sufficient scientific information and data are available to determine the likely impacts of the covered activities on the species and to formulate conservation measures that could effectively mitigate and conserve the species. Some species are so poorly understood, that appropriate evaluations cannot be performed for permitting processes under the current state of knowledge. A guide for this criterion is if the species is covered or proposed for coverage under other HCPs and NCCPs, which indicates a confidence that sufficient information is available to cover the species.



**Exhibit 1. Evaluation of Listed Endangered and Threatened and Fully Protected Fish and Wildlife Species Known or Likely to Occur in the Planning Area for Coverage under the BDCP**

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
Species Associated with Proposed Covered Natural Communities						
Listed Species						
Mammals						
Neotoma fuscipes riparia Riparian woodrat	E/SSC	+	U	U	+	Undetermined
Sylvilagus bachmani riparius Riparian brush rabbit	E/E	+	+	+ (H, ID)	+	Yes
Birds						
Riparia riparia Bank swallow	-/T	+	+	-	+	No
Coccyzus americanus occidentalis Western yellow-billed cuckoo	BCC /E	+	+	-	+	No
Charadrius alexandrinus Snowy plover (coastal population)	T/SSC	+	U	U	+	Undetermined
Buteo swainsoni Swainson’s hawk	BCC /T	+	+	+ (H, ID, AD)	+	Yes
Reptiles						
Thamnophis gigas Giant garter snake	T/T	+	+	+ (H, ID, AD)	+	Yes
Fish						
Hypomesus transpacificus* Delta smelt	T/T	+	+	+ (ID, O)	+	Yes

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
<i>Oncorhynchus mykiss</i> * Steelhead, Central Valley DPS	T/-	+	+	+ (ID, O)	+	Yes
<i>Oncorhynchus tshawytscha</i> * Chinook salmon, Sacramento River winter-run	E/E	+	+	+ (ID, O)	+	Yes
<i>Oncorhynchus tshawytscha</i> * Chinook salmon, Central Valley spring-run	T/T	+	+	+ (ID, O)	+	Yes
<i>Acipenser medirostris</i> Green sturgeon	T/SSC	+	+	+ (ID, O)	+	Yes
<b>Invertebrates</b>						
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	T/-	+	+	+ (H, ID, AD)	+	Yes
<b>Fully Protected Species</b>						
<b>Mammals</b>						
<i>Reithrodontomys raviventr</i> Salt marsh harvest mouse	E/E,FP	+	+	+ (H)	+	Yes
<b>Birds</b>						
<i>Sterna antillarum browni</i> California least tern	E/E,FP	+	+	-	+	No
<i>Laterallus jamaicensis coturniculus</i> California black rail	BCC /T,FP	+	+	+ (H, ID, AD)	+	Yes
<i>Rallus longirostris obsoletus</i> California clapper rail	E/E,FP	+	+	+ (H)	+	Yes

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
<i>Haliaeetus leucocephalus</i> Bald eagle	T,PD/E,FP	+	+	-	+	No
<i>Elanus leucurus</i> White-tailed kite	-/FP	-	+	+ (H, ID, AD)	+	No
<b>Species Associated with other Planning Area Natural Communities</b>						
<b>Listed Species</b>						
<b>Mammals</b>						
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	E/T	+	+	-	+	No
<b>Amphibians</b>						
<i>Ambystoma californiense</i> California tiger salamander (Central Valley DPS)	T/SSC	+	+	U	+	Undetermined
<i>Rana aurora draytonii</i> California red-legged frog	T/SSC	+	+	-	+	No
<b>Invertebrates</b>						
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	E/-	+	+	+ (H, AD)	+	Yes
<i>Branchinecta longiantenna</i> Longhorn fairy shrimp	E/-	+	+	+ (H, AD)	+	Yes
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	T/-	+	+	+ (H, AD)	+	Yes
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	E/-	+	+	+ (H, AD)	+	Yes

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
<i>Elaphrus viridis</i> Delta green ground beetle	E/-	+	+	-	+	No
<i>Apodemia mormo langei</i> Lange's metalmark	E/-	+	+	-	+	No
<b>Fully Protected Species</b>						
<i>Grus canadensis tabida</i> Greater sandhill crane	-/T,FP	+	+	+ (H, AD)	+	Yes
<i>Aquila chrysaetos</i> Golden eagle	-/FP	+	+	-	+	No
<p><sup>a</sup><b>Status Explanations</b></p> <p><b>Federal</b></p> <p>E = listed as endangered under the federal Endangered Species Act (ESA)</p> <p>T = listed as threatened under the federal ESA</p> <p>PD = proposed for delisting under federal ESA</p> <p>BCC = U.S. Fish and Wildlife Service bird of conservation concern</p> <p>NSC = National Marine Fisheries Service species of concern</p> <p>- = no status</p> <p><b>State</b></p> <p>E = listed as endangered under the California ESA</p> <p>T = listed as threatened under the California ESA</p> <p>SCD = candidate for delisting</p> <p>FP = fully protected under the California Fish and Game Code</p> <p>SSC = California species of special concern</p> <p>- = no status</p> <p><sup>b</sup><b>Criteria met or not</b></p> <p>+ = Species meets the selection criterion</p> <p>- = Species does not meet the selection criterion</p> <p>U = Uncertain whether species meets selection criterion. More investigation required.</p> <p><sup>c</sup><b>BDCP Actions (covered activities and conservation measures) potentially adversely affecting the species</b></p> <p>H = habitat restoration actions</p> <p>ID = in-Delta conveyance facilities</p> <p>AD = around-Delta conveyance facilities</p> <p>O = water operations</p> <p>* ESA designated critical habitat for this species is present in the Planning Area.</p>						

**Exhibit 2. Evaluation of Non-Listed Special-Status Fish and Wildlife Species Known or Likely to Occur in the Planning Area for Coverage under the BDCP**

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
Species Associated with Proposed Covered Natural Communities						
Mammals						
Antrozous pallidus Pallid bat	-/SSC	-	+	U	+	No
Corynorhinus townsendii Townsend’s western big-eared bat	-/SSC	-	+	-	+	No
Eumops perotis californicus Western mastiff bat	-/SSC	-	+	-	+	No
Sorex ornatus sinuosus Suisun shrew	-/SSC	+	+	+ (H)	+	Yes
Birds						
Xanthocephalus xanthocephalus Yellow-headed blackbird	-/SSC	-	+	+ (H, AD)	+	No
Agelaius tricolor Tricolored blackbird	BCC /SSC	+	+	+ (H, AD, ID)	+	Yes
Melospiza melodia maxillaries Suisun song sparrow	BCC /SSC	+	U	U	+	Undetermined
Icteria viriens Yellow breasted chat	-/SSC	+	+	+ (H, AD)	+	Yes
Lanius ludovicianus Loggerhead shrike	BCC/SSC	-	+	+ (H, AD)	+	No

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
<i>Melanerpes lewis</i> Lewis's woodpecker	BCC/-	-	+	+	+	No
<i>Asio flammeus</i> Short-eared owl	-/SSC	-	+	+ (H, AD)	+	No
<i>Asio otus</i> Long eared owl	-/SSC	-	+	+ (H, AD)	+	No
<i>Chlidonias niger</i> Black tern	-/SSC	-	+	+ (H)	+	No
<i>Numenius americanus</i> Long-billed curlew	BCC	-	+	+ (H, AD)	+	No
<i>Charadrius alexandrinus</i> Snowy plover (interior population)	-/SSC	+	U	U	+	Undetermined
<i>Circus cyaneus</i> Northern harrier	-/SSC	-	+	+ (H, AD)	+	No
<i>Anser albifrons elgasi</i> Tule white-fronted goose	-/SSC	+	U	U	+	Undetermined
<b>Reptiles</b>						
<i>Emys marmorata</i> Western pond turtle	-/SSC	-	+	+ (H, ID, AD)	+	No
<b>Fish</b>						
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	-/SSC	+	+	+ (ID, O)	+	Yes
<i>Spirinchus thaleichthys</i> Longfin smelt	-/C	+	+	+ (ID, O)	+	Yes

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
<i>Thaleichthys pacificus</i> Pacific smelt	- <sup>d</sup> /SSC	+	U	U	+	Undetermined
<i>Mylopharodon conocephalus</i> Hardhead	-/SSC	-	+	+ (ID, O)	+	No
<i>Lavinia symmetricus</i> ssp. <i>symmetricus</i> California roach, Sacramento-San Joaquin subspecies	-/SSC	-	+	+ (ID, O)	+	No
<i>Oncorhynchus tshawytscha</i> Chinook salmon, Central Valley fall- /late fall-run	NSC /SSC	+	+	+ (ID, O)	+	Yes
<i>Acipenser transmontanus</i> White sturgeon	-/- <sup>e</sup>	+	+	+ (ID, O)	+	Yes
<i>Lampetra ayresii</i> River lamprey	-/SSC	+	+	+ (ID, O)	+	Yes
<b>Species Associated with other Planning Area Natural Communities</b>						
<i>Taxidea taxus</i> American badger	-/SSC	-	+	+ (AD)	+	No
<i>Athene cunicularia</i> Burrowing owl	BCC /SSC	+	+	+ (AD)	+	Yes
<i>Charadrius montanu</i> Mountain plover	BCC /SSC	-	+	+ (H, AD)	+	No
<i>Grus canadensis canadensis</i> Lesser sandhill crane	-/SSC	-	+	+ (H, AD, ID)	+	No
<i>Falco mexicanus</i> Prairie falcon	BCC	-	+	-	+	No

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/State)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to Adversely Affect <sup>c</sup>	Sufficient Information	
<i>Phrynosoma coronatum frontale</i> Coast horned lizard	-/SSC	+	U	U	+	Undetermined
<i>Anniella pulchra pulchra</i> Silvery legless lizard	-/SSC	-	+	-	+	No
<i>Spea hammondi</i> Western spadefoot toad	-/SSC	+	+	+ (H, AD)	+	Yes
<p><sup>a</sup><b>Status Explanations</b></p> <p><b>Federal</b></p> <p>BCC = U.S. Fish and Wildlife Service bird of conservation concern</p> <p>NSC = National Marine Fisheries Service species of concern</p> <p>- = no status</p> <p><b>State</b></p> <p>SSC = California species of special concern</p> <p>C = Candidate for listing under CESA</p> <p>- = no status</p> <p><sup>b</sup> <b>Criteria met or not</b></p> <p>+ = Species meets the selection criterion</p> <p>- = Species does not meet the selection criterion</p> <p>U = Uncertain whether species meets selection criterion. More investigation required.</p> <p><sup>c</sup> <b>BDCP Actions (covered activities and conservation measures) potentially adversely affecting the species</b></p> <p>H = habitat restoration actions</p> <p>ID = in-Delta conveyance facilities</p> <p>AD = around-Delta conveyance facilities</p> <p>O = water operations</p> <p><sup>d</sup> NMFS has accepted a petition to list the species and is currently conducting a status review as of 3/12/08</p> <p><sup>e</sup> White sturgeon is included as a covered species in accordance with the BDCP Planning Agreement</p>						



**Exhibit 3. Evaluation of Listed Endangered, Threatened, and Rare Plant Species Known or Likely to Occur in the Planning Area for Coverage Under the BDCP**

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/ State/ CNPS)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	
Species Associated with Proposed Covered Natural Communities						
<i>Cordylanthus mollis</i> ssp. <i>mollis</i> Soft bird’s-beak	E/R/IB	+	+	+ (H, O)	+	Yes
<i>Eryngium racemosum</i> Delta button celery	-/E/1B	+	+	+ (H, ID, O)	+	Yes
<i>Lilaeopsis masonii</i> Mason’s lilaeopsis	-/R/1B	+	+	+ (H, ID, O)	+	Yes
Species Associated with other Planning Area Natural Communities						
<i>Amsinckia grandiflora</i> Large-flowered fiddleneck	E/E/1B	+	U	-	+	No
<i>Castilleja campestris</i> ssp. <i>succulenta</i> Succulent owl’s clover	T/E/1B	+	U	U	+	Undetermined
<i>Erysimum capitatum</i> spp. <i>angustatum</i> * Contra Costa wallflower	E/E/1B	+	+	-	+	No
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	-/E/1B	+	+	U	+	Undetermined
<i>Lasthenia conjugens</i> Contra Costa goldfields	E/-/1B	+	+	-	+	No
<i>Neostapfia colusana</i> Colusa grass	T/E/1B	+	+	-	+	No
<i>Oenothera deltoides</i> ssp. <i>howellii</i> * Antioch Dunes evening primrose	E/E/1B	+	+	-	+	No

<i>Scientific Name/ Common Name</i>	<i>Status<sup>a</sup> (Federal/ State/ CNPS)</i>	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				<i>Consider for Coverage?</i>
		<i>Listing Potential</i>	<i>Occurrence in the Plan Area</i>	<i>Potential to be Adversely Affected<sup>c</sup></i>	<i>Sufficient Information</i>	
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	T/E/1B	+	U	U (AD)	+	Undetermined
<i>Orcuttia pilosa</i> Hairy Orcutt grass	E/E/1B	+	U	U (AD)	+	Undetermined
<i>Orcuttia tenuis</i> Slender Orcutt grass	T/E/1B	+	U	U (AD)	+	Undetermined
<i>Orcuttia viscida</i> Sacramento Orcutt grass	E/E/1B	+	U	U (AD)	+	Undetermined
<i>Trifolium amoenum</i> Showy indian clover	E/-/1B	+	U	-	+	No
<i>Tuctoria greenei</i> Greene's tuctoria	E/R/1B	+	U	U (AD)	+	Undetermined
<i>Tuctoria mucronata</i> Solano grass	E/E/1B	+	+	-	+	No

Scientific Name/  Common Name	Status <sup>a</sup> (Federal/ State/ CNPS)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	
<sup>a</sup> <b>Status Explanations</b>		<sup>b</sup> <b>Criteria met or not</b>				
<b>Federal</b>						
E	= listed as endangered under the federal Endangered Species Act (ESA)	+ = species meets the selection criterion.				
T	= listed as threatened under the federal ESA	- = species does not meet the selection criterion.				
C	= candidate for listing under the federal ESA	U = Uncertain whether species meets selection criterion. More investigation				
–	= no status	required.				
<b>State</b>		<sup>c</sup> <b>BDCP Actions (covered activities and conservation measures) potentially adversely affecting the species</b>				
E	= listed as endangered under the California ESA	H = habitat restoration actions				
T	= listed as threatened under California ESA	ID = in-Delta conveyance facilities				
R	= listed as rare under the California Native Plant Protection Act	AD = around-Delta conveyance facilities				
–	= no status	O = water operations				
<b>California Native Plant Society (CNPS)</b>		* Critical habitat for this species is present in the planning area				
1A	= presumed extinct in California					
1B	= rare or endangered in California and elsewhere					
2	= rare and endangered in California, more common elsewhere					
–	= no status.					

**Exhibit 4. Evaluation of Non-Listed Special-Status Plant Species Known or Likely to Occur in the Planning Area for Coverage Under the BDCP**

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/ State/ CNPS)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	
Species Associated with Proposed Covered Natural Communities						
<i>Aster lentus</i> Suisun Marsh aster	-/-1B	+	+	+	+	Yes
<i>Cirsium crassicaule</i> Slough thistle	-/-1B	U	+	+	+	Undetermined
<i>Hibiscus lasiocarpus</i> Rose-mallow	-/-2	-	+	+	+	No
<i>Juglans californica</i> var. <i>hindsii</i> Northern California black walnut	-/-1B	-	+	+	+	No
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	-/-1B	+	+	+	+	Yes
<i>Limosella subulata</i> Delta mudwort	-/-2	+	+	+	+	Yes
<i>Potamogeton zosteriformis</i> Eel-grass pondweed	-/-2	-	+	+	+	No
<i>Sagittaria sanfordi</i> Sanford's arrowhead	-/-1B	-	+	+	+	No
Species Associated with other Planning Area Natural Communities						
<i>Astragalus rattanii</i> var. <i>jepsonianus</i> Jepson's milk-vetch	-/-1B	+	U	-	+	No
<i>Astragalus tener</i> var. <i>ferrisiae</i> Ferris' milk-vetch	-/-1B	+	+	-	+	No

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/ State/ CNPS)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	-/-/1B	+	+	+ (AD)	+	Yes
<i>Atriplex cordulata</i> Heartscale	-/-/1B	+	+	U (AD)	+	Undetermined
<i>Atriplex depressa</i> Brittlescale	-/-/1B	+	+	U (AD)	+	Undetermined
<i>Atriplex joaquiniana</i> San Joaquin spearscale	-/-/1B	+	+	+ (AD)	+	Yes
<i>Atriplex minuscula</i> Lesser saltscale	-/-/1B	+	+	U (AD)	+	Undetermined
<i>Atriplex persistens</i> Vernal pool smallscale	-/-/1B	+	+	U (AD)	+	Undetermined
<i>Blepharizonia plumosa</i> Big tarplant	-/-/1B	+	+	U (AD)	+	Undetermined
<i>Carex comosa</i> Bristly sedge	-/-/2	U	+	+ (H, ID)	+	Undetermined
<i>Delphinium recurvatum</i> Recurved larkspur	-/-/1B	+	+	-	+	No
<i>Erodium macrophyllum</i> Round-leafed filaree	-/-/2	+	+	U (AD)	+	Undetermined
<i>Eschscholzia rhombipetala</i> Diamond-petaled California poppy	-/-/1B	+	+	-	+	No
<i>Fritillaria liliacea</i> Fragrant fritillary	-/-/1B	U	+	-	+	No
<i>Fritillaria pluriflora</i> Adobe-lily	-/-/1B	-	+	-	+	No

Scientific Name/ Common Name	Status <sup>a</sup> (Federal/ State/ CNPS)	SELECTION CRITERIA FOR REGULATORY COVERAGE <sup>b</sup>				Consider for Coverage?
		Listing Potential	Occurrence in the Plan Area	Potential to be Adversely Affected <sup>c</sup>	Sufficient Information	
<i>Hemizonia parryi</i> spp. <i>congdonii</i> (aka <i>Centromadia parryi</i> spp. <i>congdonii</i> ) Congdon's tarplant	-/-/1B	U	+	-	+	No
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarf rush	-/-/1B	+	U	U (AD)	+	Undetermined
<i>Legenere limosa</i> Legenere	-/-/1B	+	+	+	+	Yes
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's peppergrass	-/-/1B	+	+	+	+	Yes
<i>Madia radiata</i> Showy madia	-/-/1B	+	+	-	+	No
<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i> Adobe navarretia	-/-/1B	+	U	-	+	No
<i>Tropidocarpum capparideum</i> Caper-fruited tropidocarpum	-/-/1B	U	+	+	+	Undetermined
<sup>a</sup> <b>Status Explanations</b> <b>Federal</b> - = no status  <b>State</b> - = no status  <b>California Native Plant Society (CNPS)</b> 1A = presumed extinct in California 1B = rare or endangered in California and elsewhere 2 = rare and endangered in California, more common elsewhere - = no status.						
<sup>b</sup> <b>Criteria met or not</b> + = species meets the selection criterion. - = species does not meet the selection criterion. U = Uncertain whether species meets selection criterion. More investigation required.  <sup>c</sup> <b>BDCP Actions (covered activities and conservation measures) potentially adversely affecting the species</b> H = habitat restoration actions ID = in-Delta conveyance facilities AD = around-Delta conveyance facilities O = water operations						

**May 22, 2008**